REMARKS

Allowable claims

The applicant has rewritten claims 11, 34, 48, and 61 in independent form to include all the limitations of their respective base claims and intervening claims. These claims, and their dependent claims, are therefore allowable as indicated in the office action.

Independent claims 1, 2, and 40

Independent claims 1 has been amended to require that

"translating said monophonic audio signal to the representation of the series of discrete tones includes segmenting the monophonic audio signal into a series of segments according to time varying features of the audio signal that include a feature associated with energy and a feature associated with spectral composition, wherein each tone in the series of discrete tones is associated with a different segment in the series of segments."

Claim 1 stands rejected as anticipated by *Tolonen* (US Pat. 6,541,691). The applicant recognizes that *Tolonen* teaches processing audio to produce notes or other musical information. However, *Tolonen* relies on changes in fundamental frequency to segment an audio signal. For example, in FIG. 9, it is detection of different pitch (step 97) that determines than a new note should be chosen. In contrast, claim 1 requires that "time varying features of the audio signal that include a feature associated with energy and a feature associated with spectral composition" are used to segment the input signal. *Tolonen* may use periodicity (pitch), but he does not disclose or suggest use of either or both of energy and spectral composition. For example, with reference to FIG. 9, "measure signal level" (step 90) is used only to ignore ("analysis is aborted") frames with low signals but not used to determine the segments themselves. The applicant also notes that the examiner associates voicing with "spectral composition." With regard to claim 1, voicing is not a measure associated with spectral composition because it is derived from a time-domain analysis of the signal and not from an analysis of a the spectrum associated with the signal.

Claims 2, and 40 are allowable for similar reasons as set forth for claim 1.

Applicant : John D. Puterbaugh   Attorney's Docket No.: 16759-003001
Serial No.: 10/037,097
Filed   : December 31, 2001
Page   : 24 of 24

Dependent claims that depend on claims 1, 2, and 40 are allowable for at least the reasons that the respective independent claims upon which they depend are allowable.
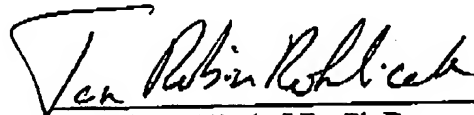
New claim 76

New claims 76 is directed to a method for providing a ring tone for a device. The cited references do not disclose or suggest the use a voice input to generate data that is to be loaded into a device. In support for rejection of some of the currently pending claims, the examiner proposes the combination of *Tolonen* and *Theimer* (US Pat. 6,437,227) as teaching voice input at a device and translating the voice signal into a range of tones within the capability of a mobile telephone output synthesizer. The applicant does not agree that, even if combined, these references disclose or suggest such a combination. *Theimer* may disclose voice input at a telephone for the purpose of selecting a piece of music or other audio, but the references do not together disclose or suggest determining a ring tone or any other representation of notes to be transmitted back to the device. For at least this reason, new claim 76 and its dependent claims are patentable over this combination of references.

Please apply $500 for excess claim fees and a $60 for the Petition for Extension of Time fee, and any other charges or credits, to deposit account 06-1050, referencing Attorney Docket No. 16759-003001.

Respectfully submitted,

Date: *July 5, 2005*   *J. Robin Rohlicek*

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